

## PATENT CLAIMS

1. A traction motor (1) in vehicles with an electric or diesel-electric drive, the traction motor (1) which is mounted in a housing (11) being grounded, characterized in that the traction motor (1) is grounded via at least one grounding capacitor ( $C_{\text{ground}}$ ).
2. The traction motor (1) as claimed in claim 1, characterized in that the traction motor (1) can be supplied via electronic power actuating elements.
3. The traction motor (1) as claimed in claim 1 or 2, characterized in that the grounding connection is between the housing (11) of the traction motor (1) and a vehicle ground is made in or on a rotational speed sensor (12).
4. The traction motor (1) as claimed in claim 1 or 2, characterized in that the grounding connection between the housing (11) of the traction motor (1) and a vehicle ground is made via the shielding (15) of the power cable.
5. The traction motor (1) as claimed in claim 2, characterized in that the grounding connection between the housing (11) of the traction motor (1) and a vehicle ground is made in the converter.
6. The traction motor (1) as claimed in claim 5, characterized in that the grounding connection is made via a separate line in the power supply cable (9) or via the cable shielding of the power supply cable (9).
7. The traction motor (1) as claimed in one of the preceding claims, characterized in that the electrical voltage is monitored at at least one bearing (10) as a measured variable of a functionally capable grounding connection via the grounding capacitor ( $C_{\text{ground}}$ ).